

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015872**Date Inspected:** 24-Jul-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

This QA Inspector randomly observed the following work in progress in Bay 10:

Heat straightening of PCMK OBG lift 13, side plate SP3110A. QC was identified as ZPMC CWI Liu Yang (QC1).

Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Yuan Hui Gang (QCA1), who was not a CWI. Heat treatment observed by this QA Inspector and recorded by QCA1 appeared to comply with HSR1(B)8860 presented to this QA Inspector by QCA1. See photo below.

SMAW welding of weld joints SSD1-TL5-1E-F-8 and SSD1-TL5-1F-F-19 located on PCMK south tower, lift 5, internal connection plates. Welders were identified as 052493, 052930, respectively. QC was identified at QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Deng Zhi Bing (QCA2), who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-T-3313-TC-P5. Also at this location and appearing to be monitoring the welding operation was ABF Representative Chi Zheng Hua.

SMAW welding of weld joints SSD1-TL5-1E-F-5A and SSD1-TL5-1F-F-18B located on PCMK south tower, lift 5, internal connection plates. Welders were identified as 056200, 040582, respectively. QC was identified at QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA2, who

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was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-T-3213-TC-U5b. Also at this location and appearing to be monitoring the welding operation was ABF Representative Wang Zhang Hua.

### Bay 11

This QA Inspector randomly observed the following work in progress in Bay 11:

SMAW welding of weld joint ESD1-TL5-2E/F-8B, 6 located on PCMK east tower, lift 5, internal connection plates. Alternating welders were identified as 046769, 046709. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Mao Bin Bin (QCA3), who was not a CWI. Welding variables recorded by QCA3 appeared to comply with WPS-B-T-3213-TC-U5b and WPS-B-T-3313-TC-P5, respectively. Also at this location and appearing to be monitoring the welding operation was ABF Representative Wang Zhang Hua.

SMAW welding of weld joint ESD1-TL5-2F/F-18B, 3 located on PCMK east tower, lift 5, internal connection plates. Alternating welders were identified as 044541, 044551. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA3 who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U5b and WPS-B-T-3313-TC-P5, respectively. Also at this location and appearing to be monitoring the welding operation was ABF Representative Wang Zhang Hua.

### Heavy Dock

This QA Inspector randomly observed the following work being performed on the Heavy Dock:

This QA Inspector observed no apparent welding related work was being performed on the Heavy Dock. All 4 tower lifts 2 were erect with all 4 tower lifts 3 attached above, respectively. The lifts 2/3 worker access tower elevator was dark and appeared to be off and unmanned. Crossbeams 7, 8, 9, and 10 were positioned on deck on the ship moored to the end of the Heavy Dock, as before. OBG segments 7E, 7W, 8E, and 8W were positioned on deck, forward and aft of the crossbeam sections with segment 7W positioned on top of 7E and segment 8W positioned on top of 8E. ZPMC workers were removing sandblast grit using brushes and vacuums from the bottom plate and side plate areas of OBG segment 8CE, panel points 67~69 and OBG segments 8AW/8BW, panel points 63~66.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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## Summary of Conversations:

No significant conversations.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Goulet, George	Quality Assurance Inspector
<b>Reviewed By:</b>	Dawson, Paul	QA Reviewer

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